In claims 3-11, line 1, delete, "composition"; replace therefor --superconducting apparatus--.

24. (Amended) [A method including the steps of forming] An apparatus comprising:

a transition metal oxide having a phase therein which exhibits a superconducting state at a critical temperature in excess of 26°K,

means for maintaining the temperature of said material at a temperature less than said critical temperature to produce said superconducting state in said phase, and

means for passing an electrical supercurrent through said transition metal oxide while it is in said superconducting state.

In claim 25-~~27~~ 26, line 1, delete "method"; replace therefor --apparatus--.

27. (Amended) A superconducting apparatus comprising a composition having a transition temperature in excess of 26°K, said composition being a substituted Cu-oxide including a superconducting phase having a structure substantially close to the orthorhombic-tetragonal phase transition of said composition means for maintaining said composition at a temperature greater than said transition temperature to put said composition in a superconducting state; and means for passing current through said composition while in said superconducting state.

In claims 28-31, line 1, delete "composition"; replace therefor --superconducting apparatus--.

33. (Amended) A superconducting apparatus comprising a composition having a superconducting onset temperature in excess of 26°K., the composition being comprised of a copper oxide doped with an alkaline earth element where the concentration of said alkaline earth element is near to the concentration of said alkaline earth element where the superconducting copper oxide phase in said composition undergoes an orthorhombic to tetragonal structural phase transition.

In claim 34, line 1, after "superconducting", insert --apparatus comprising a--.

In claim 35, line 1, delete "composition"; replace therefor --superconducting apparatus--.

40. (Amended) [A] An apparatus comprising asuperconductor exhibiting a superconducting onset at [a] an onset temperature in excess of 26°K, said superconductor being comprised of at least four elements, none of which is itself superconducting, means for maintaining said superconductor at an operating temperature in excess of said onset temperature to maintain said superconductor in a superconducting state and means for passing current through said superconductor while in said superconducting state.

In claims 41-45, delete "superconductor"; replace therefor --apparatus--.

In claim 46, line 1, delete "A"; replace therefor --An apparatus comprising--.

86. (Amended) [A method] An apparatus comprising [the steps of]:[forming] a composition including a transition metal, a rare earth or rare earth-like element, an alkaline earth element, and oxygen, where said composition is a mixed transition metla

oxide having a non-stoichiometric amount of oxygen therein and exhibiting a superconducting state at a temperature greater than 26°K,

means for maintaining said composition in said superconducting state at a temperature greater than 26°K, and

means for passing an electrical current through said composition while said composition is in said superconducting state.

96. (Amended) A superconductive [method] apparatus for causing electric-current flow in a superconductive state at a temperature in excess of 26 K, comprising:

(a) [providing] a superconductor element made of a superconductive composition, the superconductive composition consisting essentially of a copper-oxide compound having a layer-type perovskite-like crystal structure, the composition having a superconductor transition temperature T_c of greater than 26 K;

(b) means for maintaining the superconductor element at a temperature above 26 K and below the superconductor transition temperature T_c of the superconductive composition; and

(c) means for causing an electric current to flow in the superconductor element.

103. (Amended) A superconductor [method] apparatus for conducting an electric current essentially without resistive losses, comprising:

(a) [providing] a superconductor element made of a superconductive composition, the superconductive composition consisting essentially of a copper-oxide compound having a layer-type perovskite-like crystal structure, the copper-oxide compound including at least one rare-earth or rare-earth-like element and at least one alkaline-earth element, the composition having a superconductive/resistive transition defining a superconductive/resistive-transition temperature range between an upper limit defined by a transition-onset temperature T_c and a lower limit defined by an effectively-zero-bulk-resistivity intercept temperature $T_{\rho=0}$, the transition-onset temperature T_c being greater than 26 K;

(b) means for maintaining the superconductor element at a temperature below the effectively-zero-bulk-resistivity intercept temperature $T_{\rho=0}$ of the superconductive composition; and

(c) means for causing an electric current to flow in the superconductor element.

Respectfully submitted,

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